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No. 99-8508

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IN THE

Supreme Court of the United States

DANNY LEE KYLLO,

Petitioner,

v.

UNITED STATES OF AMERICA,

Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

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PETITIONER'S REPLY BRIEF

KENNETH LERNER
Counsel of Record
LERNER & MEYER
621 S.W. Morrison Street
Suite 1450
Portland, Oregon 97205
(503) 223-0442
Counsel for Petitioner

WILSON-EPES PRINTING CO., INC. – (202) 789-0096 – WASHINGTON, D. C. 20001

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QUESTION PRESENTED

WHETHER THE WARRANTLESS USE OF A THERMAL IMAGING DEVICE TO DETECT HEAT SOURCES WITHIN A HOME CONSTITUTES AN UNREASONABLE SEARCH AND SEIZURE UNDER THE FOURTH AMENDMENT TO THE UNITED STATES CONSTITUTION.

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ARGUMENT

I. HOMES ARE ENTITLED TO THE GREATEST PROTECTION UNDER THE FOURTH AMENDMENT

The government's brief demonstrates that there are many points of agreement. The government agrees that the core protection of the Fourth Amendment is privacy of the home, and that an occupant has a privacy interest in the activities that take place within the home. G. Br. 18-19. Furthermore, the government agrees that Mr. Kyllo certainly had a subjective expectation that activity occurring within his home would not be observed or detected from the outside. G. Br. 20.

The government agrees that technological advances pose a serious potential of encroaching on privacy, G. Br. 11, 14, and that such potential crystallizes with the capacity to gain information about activities within a building. G. Br. 19 n. 13. No comprehensive principles have developed for determining when such an intrusion occurs, G. Br. 17, but it certainly occurs when modern technology discloses to the senses associations, objects or activities otherwise imperceptible to the police or fellow citizens. G. Br. 23.

This is the very constitutional problem presented by thermal imaging. This Court has expressly condemned warrantless electronic monitoring of the home even if it "constitutes only a minuscule intrusion on protected privacy interests." *United States v. Karo*, 468 U.S. 705 (1984). Thermal imaging falls within this well-delineated rule. It discloses to the human senses information about private activities that is otherwise imperceptible to the police or a fellow citizen, and allows the police to learn facts about the interior of a home that could not be known without physical entry. Such an electronic search requires a warrant.

A. Thermal Imaging Infringes On The Privacy Of The Home And Requires A Warrant

Electronic monitoring need not physically penetrate a structure to run afoul of the Fourth Amendment. *Katz v. United States*, 389 U.S. 347 (1967). To be constitutionally invasive it need only detect from the outside information that could not otherwise have been known without physical invasion. *Karo*, 468 U.S. at 715. Thermal imaging is such an invasive technology. It locates intense heat sources inside the home that radiate invisible heat waves through the wall.

It is no surprise that the government does not embrace *Karo*, or even discuss it in the first thirty pages of its analysis. An attempt is made to distinguish *Karo* from the case here, but these distinctions are meritless. Rather, the government argues that Mr. Kyllo does not satisfy the second prong of the *Katz* test.[1]

However, the government's analysis is factually and legally erroneous. First, it focuses exclusively on one aspect of the thermal imager's physical operation, asserting that the thermal imager only detects infrared radiation that is emitted

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[1] The government argues without support that *Katz* was fully intended to apply to the home. Its basis for this assertion is the rather obvious statement echoed in both the majority opinion, *Katz*, 389 U.S. at 351, and Justice Harlan's concurrence, *Katz*, 389 U.S. at 361, that there can be no expectation of privacy in matters that are knowingly exposed, even in one's home. But this is a far cry from saying that Justice Harlan intended that his factors be applied to activity within the home. This Court has observed that Justice Harlan's concurrence was focused on the evil of electronic surveillance. *California v. Ciraolo*, 467 U.S. 207, 214-15 (1986). The claim that *Smith v. Maryland*, 442 U.S. 735, 742-743 (1979), was a home search that applied the *Katz* test is erroneous. This Court held that Smith had knowingly exposed his telephone numbers and that the site of the call was immaterial to the analysis. *Smith*, 442 U.S. at 742-743. The pen register intercept occurred at the phone company, far removed from the home itself. In the end, the *Katz* test is not the primary guide to whether thermal imaging is an infringement on the privacy of the home, while *Karo* is.

from the outside surface of a wall; G. Br. 7. This is not accurate and ignores or trivializes other scientific principles that are the basis of the practical use of thermal imaging, and by which it reveals information about the interior of a home. Moreover, this characterization downplays the intrusiveness of thermal imaging and what it reveals.

Second, the government attempts to justify thermal imaging on the ground that an officer may view whatever may be seen that is exposed to public view, and that the use of technology to enable this observation is constitutional unless it directly detects or permits the direct observation of detailed and specific activities, objects, or people. This position is also legally and factually flawed, and fails to address the fact that invisible thermal radiation is *not* exposed to view.

The government urges a new rule that would permit the use of sophisticated technology for surveillance so long as it does not directly detect detailed activities, specific objects, or people in the interior of the home. Reduced to its essence, this argument would limit only those techniques deemed to be the functional equivalent of an x-ray or microphone.

This approach urges a constitutional test that is unprecedented and would drastically shrink the scope of privacy protection of the home guaranteed by the Fourth Amendment. Such a rule is inconsistent with this Court's decision in *United States v. Karo*, 468 U.S. 705, 715, 717 (1984), and the historical purpose of the Fourth Amendment. It would be unworkable in practice, giving no guidance to police, failing to apprise citizens when they may have exposed private activity, and presenting an impossible burden on judges to administer.

1. Thermal imaging locates internal heat sources based on factually certain scientific principles

The purpose of thermal imaging is to determine the presence of unusual heat sources *inside* the home. *State v. Young*, 123 Wash. 2d 173, 867 P. 2d 593, 598, 603 (1994); *United States v. Field*, 855 F. Supp. 1518, 1519, 1531 (W.D. Wis. 1994); *Commonwealth v. Gindlesperger*, 743 A.2d 898, 902 (Pa. 1999), petition for cert. pending (No. 99-1553). The government attempts to distract this Court from this incontrovertible fact by trivializing or minimizing this function of thermal imaging in a number of ways.

One such attempt to downplay the infringement on privacy is by stressing the physical fact that the thermal imager detects heat emissions on the *exterior* of the home, while de-emphasizing other scientific principles upon which thermal imaging operates to determine heat sources within a home that are invisibly migrating outward. This is done by claiming that the latter determination is merely a permissible inference.

The thermal imager is predicated upon the scientific principles of thermodynamics, which establish that the thermal imager is detecting heat sources *within* the home.

> Thermal energy when striking an object is partially reflected (R), partially absorbed or emitted (E), and partially transmitted (T). . . The total energy displacement in an object is equal to the [a]mount of energy striking an object (Ldg., Exh. 102, p. 14).
>
> * * * *
>
> Rather, thermal detection systems detect only thermal energy which is radiated from the outside surface of an object. Internal heat which is transmitted to the outside surface of an object is detectable. All radiated thermal energy is radiated in a straight line and is detectable from a direct line of sight [with the thermal imager] (Ldg., Exh. 102, p. 15).

The testimony below is consistent. The wall absorbs heat from an interior source (JA 48-50, 73, 96, 118), and the thermal imager detects an anomaly that shows the precise location of the heat source within the structure (JA 49-50, 94-96, 81). The laws of thermodynamics permit the thermal imager to detect the location of intense heat sources inside the home, which radiate invisible electromagnetic waves through the wall. To this extent, thermal imaging turns the house inside out. The government agrees, as it must, that this was its purpose in using the thermal imager here. G. Br. 28. This hardly falls within the category of inference.

This Court also rejected the inside/outside distinction in *Katz* when it recognized that a search occurs when electronic monitoring of sound waves emanating from the outside of a phone booth captures private conversations taking place inside a phone booth. It applied the same rationale in *Karo* in the context of beeper signals transmitted from inside a home and monitored outside. This inside/outside distinction therefore makes no constitutional difference.

Even if one assumes that the acquisition of internal information by using a thermal imager is a function of inference, this Court has never held that intrusive conduct is immune from constitutional challenge simply because police must deduce evidence of criminality. In fact, the Court was not troubled by the inferences drawn in *Karo*, where inaudible sound waves emitting from the house were captured outside by the monitor and which, coupled with other surveillance information, led to an inference that the can of chemicals was probably still in the home. This Court held that such electronic monitoring was an unconstitutional search of the home. Because of the nature of the investigation, the presence of chemicals inside was one allowable inference, assuming that the beeper had not been removed, or the chemicals consumed.

This Court also recognized that inferences may be drawn in *Minnesota v. Dickerson*, 508 U.S. 366, 374-75 (1993) when it allowed an officer conducting a stop and frisk for weapons to seize contraband that was not in plain view, but was readily apparent to the officer by his sense of touch.

In any event, thermal imaging involves little use of inferences. In the context of thermal imaging, scientific fact permits the direct conclusion that something behind a wall is heating it, and this involves little assumption or probability of error. It is the fact to be determined by anyone using the imager. If this is labeled an inference, the conclusions drawn from thermal imaging are certainly factual, scientific and hardly debatable.

As a general matter, Petitioner also agrees that there is nothing inherently wrong in drawing inferences. However, to be legitimate under the Fourth Amendment, the inference must grow out of legitimately observed facts. Therefore, the alleged permissible inferences from thermal imaging should not be used, given that the government was not entitled to capture the thermal images in the first place. All of the government's examples, such as snow melting and smoke rising, involve purely naked eye observations that the government plainly is permitted to make, from which direct deductions can be made. These examples do not address sophisticated technology used on a home to reveal what is otherwise imperceptible to humans.

Finally, a real danger lurks in the government's attempt to reduce thermal surveillance to an examination of molecules or waves, and whether they are technically inside or outside the house at the moment of detection, rather than focus on what the information conveys to us. The focus must be on whether the intrusion of thermal imaging infringes upon a societal value of privacy, *Oliver v. United States*, 466 U.S. 170, 182-183 (1984), not simply on whether the emissions at the moment of detection are technically inside or outside the

home. Technology that exploits invisible, sub-sensory phenomena ultimately fails to respect the traditional boundaries of society, and therefore leaves the population defenseless against such surveillance.

2. Mr. Kyllo did not knowingly expose his conduct, and the police were not merely observing from a public place that which was exposed to the public

This Court has held that the police may observe what may be seen by any member of the public from a public vantagepoint where they have a right to be. *California v. Ciraolo*, 467 U.S. 207, 213 (1986); *Florida v. Riley*, 488 U.S. 445, 449-50 (1989). Each case in which this principle is stated refers back to a basic point in *Katz*, 389 U.S. at 351 ("What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection"). This principle has always been applied in circumstances that involve naked eye observations or the use of technology that captures what has been knowingly exposed to the naked eye.

The government attempts to invoke this principle, stating that officers *who make observations* from a location where they have a right to be are not generally conducting a search. G. Br. 11. But this subtle rephrasing only generates new questions. What is meant by observe in the first place? It begs the question to apply such a broad statement in regard to things that are invisible, since such information is not knowingly exposed to the general public's naked eye. The unstated assumption that infrared radiation is exposed to view is contrary to the evidence and scientific facts, and therefore the premise is faulty.

There is no dispute that the thermal image operator was positioned on a public street and had an open naked-eye view of the exterior walls and roof of Mr. Kyllo's home. But he was not merely observing or taking a picture of the exterior of

Mr. Kyllo's home. The government simply ignores the fact that thermal imaging supersedes the human senses and allows the operator to see what no member of the public could see without the aid of similar technology.

For this reason, the government's reliance on technology cases previously decided by this Court is misplaced. These cases either involve purely naked eye observations,[2] magnification of naked eye observations of non-residential areas,[3] or involve the subject otherwise knowingly exposing matters to public view.[4] Further, the government exaggerates the import of these decisions.

For instance, the government relies on *United States v. Knotts*, 460 U.S. at 281-282, and *Smith v. Maryland*, 442 U.S. at 742-743, to assert that this Court has upheld the use of technology that enhances or enables observation that could not otherwise be made. G. Br. 17. However, both *Knotts* and *Smith* were premised on the fact that the defendant had knowingly exposed certain conduct, which the beeper or pen register made easier to capture. These cases permit the use of technology that makes police work more efficient, but which do no more than what the human senses could have done. Neither case addresses whether invisible radiation is knowingly exposed, nor authorizes surveillance of infrared radiation as a mere technological enhancement.

Similarly, *Air Pollution Variance Board v. W. Alfalfa Corp.*, 416 U.S. 861 (1974), involved a purely visual administrative inspection of smoke coming from a smoke stack that anyone in the vicinity of the plant could have seen. This Court likened this to an open field.

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[2] *Ciraolo*, 467 U.S. at 213; *Riley*, 488 U.S. at 449.

[3] *Dow Chemical Co. v. United States*, 476 U.S. 227, 238 (1986)

[4] *United States v. Knotts*, 460 U.S. 276, 281-282 (1983); *Smith v. Maryland*, 442 U.S. 735, 742-743 (1979)

The governments' reliance on *Dow Chemical Co. v. United States*, is particularly inapposite. *Dow Chemical* involved a regulatory inspection of a commercial property, not the surveillance of a private home. In fact, this Court found it important that the enhancement was *not* in an area immediately adjacent to a private home, where privacy expectations are most heightened. *Dow Chemical*, 476 U.S. at 237 n.4. Nowhere does it state a general proposition that "a search does not occur simply because technology enables an observation that could not otherwise be made without physical invasion." G. Br. 23 n.15. The observations this Court approved were magnified images of what could be seen with the naked eye during a legitimate flyover of an area not analogous to the curtilage of a dwelling. It did not involve the type of sophisticated technology at issue here.

This Court has never permitted the unwarranted use of technology that exceeds the human senses. Rather, it has said that the Fourth Amendment is violated when "the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house." *Karo*, 468 U.S. at 715. This principle is grounded in the rationale of *Katz* that "[w]hat a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection." *Katz*, 389 U.S. at 351.

It is by physical manifestation that we understand when we knowingly expose certain activity, and thereby have a method for preserving private matters. Extra-sensory surveillance poses a threat to privacy in the physical world in which we live.

The government also asserts that thermal imagers are generally available to the public in an effort to insulate thermal imaging from a comment in *Dow Chemical*, 476 U.S. at 238 (surveillance of private property by using highly sophisticated surveillance equipment not generally available to

the public might be constitutionally proscribed absent a warrant). Petitioner agrees with the government that the availability of any particular device should not mean that law enforcement may use intrusive technology at a person's home without a warrant. G. Br. 27-28 n.18. Moreover, there was no real showing that thermal imagers *are* commonly or generally available to the ordinary person. [5]

3. Thermal imaging infringes on legitimate privacy interests in the home

The government, and the District Court below, erroneously ignore many facts that were proven about the capability of thermal imaging. They would rather restrict the inquiry to only the imperfect imager used in this case, and to only what was actually detected at Mr. Kyllo's home.[6] The government asserts that this Court has "never held that potential, as opposed to actual, invasions of privacy constitute searches for purposes of the Fourth Amendment," *Karo*, 468 U.S. at 712, but this mistakes the Court's meaning.

In *Karo*, one of the questions presented was whether the transfer of a can of chemicals containing a beeper, without

[5] Thermal imagers are not the type of device that the average citizen possesses or comes into contact with, such as a camera, telescope, car or home computer. The devices may be bought or rented commercially from a few national companies, but it was not shown that they are locally available at the corner rental store for anyone to rent. They are sold to a finite business market, those with specific business purposes and large bank accounts (JA 36). At the time of the evidentiary hearing in 1996, the Agema 210 sold for approximately $20,000. The FLIR model brought to court then sold for $47,950. They can be rented for $1,000 or more. When they are used, it is commonly with the consent of a home or business owner for purposes of an energy audit or electrical system inspection.

[6] Indeed, the District Court disallowed Mr. Kyllo's offer of proof that thermal imaging errors led to a search of a home where no evidence of marijuana manufacturing was found simply because Petitioner could not demonstrate that the same model of imager was used (JA 177-181). These exhibits have been lodged with this Court (Ldg., Exhs. 118-121).

more, constituted a search. This Court recognized that the transfer alone conveyed no private information about Karo, and created only the potential for invasion of his privacy no greater than an officer would by walking by a home with a parabolic microphone that was never used. The Court declined to address the potential for invasion created by planting the beeper because it would do no harm unless it was used.

However, this ultimately became a constitutional violation when the beeper was monitored. Therefore, once technology is used, there is no reason for this Court to ignore what was proven below about thermal imaging technology and its actual capabilities. Consideration of these capabilities does not involve deciding a potential, as opposed to actual, invasion of privacy. Nor is it required that this Court ignore the factual findings of other courts. This is particularly important in view of the government's efforts to trivialize the thermal images.

> It may be that it is the obnoxious thing in its mildest and least repulsive form; but illegitimate and unconstitutional practices get their first footing in that way, namely, by silent approaches and slight deviations from legal modes of procedure.

Boyd v. United States, 116 U.S. 616, 635 (1886).

It matters little to the constitutional analysis that Mr. Kyllo's case did not involve a mobile home, G. Br. 33, when one circuit has noted that a thermal imager can reveal the division of rooms in a mobile home. *United States v. Olson*, 21 F. 3d 847, 848 n.5 (8th Cir. 1994). Any rule announced in this case will affect those living in mobile homes across the country.[7]

Other cases have also noted that thermal imaging can see much more than amorphous hot spots. *Field*, 855 F. Supp. at

[7] In fact the government would have this Court rely on *United States v. Ford*, 34 F.3d 992 (11th Cir. 1994), which involved thermal imaging at a mobile home.

1531 (the devices provide visual images of varying clarity, allowing the operator to draw conclusions about what is happening on the other side of the house wall); *Young*, 867 P.2d at 595 (the device can detect a human form through an open window leaning against a curtain, and can detect body heat generated by a person leaning against a plywood door). The hot areas reveal precisely the type of private information sought by law enforcement: the location within a structure of heat sources. The imager can also display dead spots in walls where a hidden safe might be located.

Petitioner demonstrated the ability of thermal imagers to gain fairly precise images through glass windows (Ldg., Exh. 107, p.8; Exh. 108). The government contends that this is irrelevant, G. Br. 31. However, proof that this can easily be done, even with the Agema 210, is an important consideration even if Mr. Kyllo himself was not detected through a closed window. It also matters not whether the imager here did or did not reveal someone having sex in a home if it is capable of doing so. *United States v. Kyllo*, 37 F. 3d 526, 530 (9th Cir. 1994). Supp. App. 56. These are not mere potential invasions, but proven capabilities that this Court must have in mind when elucidating a constitutional standard.

The government concedes that if windows or doors are open to let in air, the imager can readily detect people embracing in a darkened room. G. Br. 7, 31. It is true that people can pull the blinds for more assurance of privacy, but in an unair-conditioned home on a hot summer night, it is not unreasonable for people to leave windows open and unobscured to allow air circulation without relinquishing their reasonable expectation of privacy.[8]

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[8] The government remarkably asserts that no citizen should have a reasonable expectation of privacy if their blinds are not drawn, because police should be permitted to shine flashlights into homes without probable cause as a general crime control measure. G. Br. 32 n.20. This is a radical conclusion that goes far beyond cases permitting the use of search lights on vessels at night or flashlights to illuminate a car on a public highway. This Court has recently condemned searches and seizures that lack individualized suspicion as a matter of general crime control, *Indianapolis v. Edmonds*, __ U.S.___ 121 S.Ct. 447 (2000), and has never extended the illumination cases to the context of a home.

II. THE GOVERNMENT'S PROPOSAL IS AN UNPRECEDENTED RESTRICTION ON THE FOURTH AMENDMENT

The government asserts that thermal imaging is not a search because it does not reveal specific private activities occurring within the home. G. Br. 19. This assertion raises fundamental questions. What is a private activity and when is it revealed? How much information amounts to revealing private activity? As is commonly the case, the devil is in the details of the government's proposition.

The government highly qualifies its proposal by variously asserting that technology that enables or enhances observation constitutes an impermissible search only when it can "effectively peer through the walls of a home, and thereby wholly reveal activities within" G. Br. 14, "directly observe activities within the home," G. Br. 15, or "directly detect private activity (or other private details) occurring in a private area." G. Br. 25. None of these qualifiers are found in this Court's decisions, and their meaning is not explained.

The government proposes an extremely narrow construct under which only direct observation of clear details of specific private activity, similar to x-rays or microphones,[9] are impermissible technological searches. G. Br. 19. This is an attempt to graft a variation of the intimate details criterion employed by the Ninth Circuit majority onto the Fourth

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[9] The argument rests on the clarity of detail the microphone reveals, and perhaps on our visceral abhorrence of eavesdropping, not on whether internal information is gathered technologically that could not have been known without entering the home.

Amendment's protection against unreasonable searches and seizures, while tempering the more provocative term to avoid having to address how that phrase from *Dow Chemical*, 476 U.S. at 238, was taken out of proper context.

Having proposed a rigid and high standard, the government argues that thermal imaging falls outside this self-defined box. It does so by trivializing the image itself as showing only "amorphous white or light gray blotches", G. Br. 11, or "indistinct white or light gray splotches", G. Br. 19, based purely upon a layperson's inability to decipher more from the pictures. This downplays the fact that an experienced thermal operator can glean a wealth of information from the pictures, just as a radiologist or medical technician can glean significant information from an x-ray or sonogram. The images are direct impressions of the shape of heat waves and temperature variations caused by heat sources within the home, and they are detected to a sophisticated degree of temperature gradation.

The purpose for police use of thermal imaging is to electronically monitor a home for telltale signs of criminality, heat signatures consistent with marijuana growing.[10] While it may be that thermal images do not reveal the specific instrument causing an anomaly, the fact that it can identify the anomaly, its location in the home, and can identify it as consistent with a marijuana grow signature shows that thermal imaging is a search.

This Court has never said that information gained in a search must be detailed or specific, as the government proposes. In fact, it has held that a search occurs even where

[10] The Agema 210 used in this case is one of the crudest devices, yet it is sufficiently intrusive to implicate constitutional protections. However other thermal imagers produce markedly clearer detail (Ldg., Exh. 107, 108). If, as the government suggests, the images are only amorphous and indistinct, one wonders what use they are to the police unless they are more revealing than the government admits.

there is only a minuscule technological intrusion, *Karo*, 468 U.S. at 717, that reveals a critical fact about the interior of the premises. *Karo*, 468 U.S. at 715. *See also Arizona v. Hicks*, 480 U.S. 321 (1987) ("It matters not that the search uncovered nothing of great personal value. . . A search is a search, even if it happens to disclose nothing but the bottom of a turntable."); *Bond v. United States*, 528 U.S. __, 120 S.Ct. 1462, 146 L.Ed.2d 365 (2000) (squeezing luggage to determine what may be inside is a search).

The government attempts to distinguish *Karo* by mischaracterizing it. First, the government asserts that the beeper revealed the presence *and location* of a specific object inside the home. G. Br. 18. This is not true. It did not reveal the *location* of any object in the home. For this reason, a thermal imager is more precise than a beeper.

The government also asserts that the critical factual difference in *Karo* is that the beeper entered the house. However, this Court held that neither the placement of the beeper nor the transfer of the container to the defendant constituted a search or seizure. *Karo*, 468 U.S. at 712-713. Nor did this Court place any emphasis on how or whether the beeper entered the house, but held that it was impermissible to monitor the beeper once it was inside a private residence to determine that it was there. *Karo*, 468 U.S. at 714-715. To credit the placement or entry of the beeper now would mean a rejection of *Karo*, and would re-introduce a trespass consideration that *Katz* expressly discarded.

Ultimately the attempt to distinguish *Karo* boils down to the intimate details rationale used by the Ninth Circuit majority, that the monitoring here did not reveal specific enough information to be constitutionally significant. This gloss represents a new and untested exception to the warrant requirement, and is not supported by analysis of this Court's precedents. It is legitimate to ask why it should be permissible to use a thermal imager to gain details of internal

heat patterns from an exterior wall, but not an x-ray or microphone. This distinction proposed is unworkable and unduly restrictive, and would not protect individuals from advanced technological surveillance in their homes.

III. THE GOVERNMENT'S PROPOSAL IS VAGUE AND UNCERTAIN IN APPLICATION

The government's argument essentially asserts that the clarity of the discovered information should be the defining criterion. Under this view thermal images are too amorphous to reveal specific activity even if the thermal images reveal important information to the police.[11] But the government's terminology raises more questions than it answers.

What, for instance, is meant by activity? What is a specific activity? What details of activity are protected by the Fourth Amendment? When do such details come into focus? What does reveal mean? At what degree of clarity is a detail of activity revealed? How much indistinct detail might accumulate to become too invasive? Who will decide these questions and by what standard? Most of all how would such a rule guide the police so as to avoid unconstitutional intrusions? How will the citizens know how to protect what they regard as private activities from disclosure?

These debatable minutia are reminiscent of the pre-*Katz* trespass cases and the now discredited debate over how deeply a spike-mike could penetrated a wall. *See Silverman v. United States*, 365 U.S. 511 (1961). This proposal will encourage endless controversy over what details of activity are protected, how clearly such details must be revealed,

[11] The government contradicts itself by asserting to this Court that the images are too indistinct to reveal private activity while using the same information to persuade the magistrate that the thermal images reveal strong evidence of what was going on inside the home.

which versions of the same technology are permitted, and at which portions of a house they can or cannot be aimed.

The government's construct also suffers from the flaw that it can only be applied after a claimed invasion. This quality, and the lack of guidance it provides, will only encourage broader uses of technology in the hope that other acquired details of activity are deemed to be unworthy of protection. Inevitably such a test forces courts to make value judgments about the relative importance of the details of other people's lives, a prospect which this Court should shun.

This Court need not open these questions. Nor should the Court decide whether certain information about the home, which the police believe is valuable enough to monitor, is at the same time too unimportant for any citizen to reasonably expect to be private and protected. This misdirects attention from the constitutional values at stake, and the core function of the home as a private refuge.

Karo answers the issue presented here. The relevant point is that thermal images communicate critical information about activity taking place inside the home that the government is extremely interested in knowing. It matters little that the monitoring is not the functional equivalent of an x-ray machine.

Lastly, the government asserts that Petitioner is misguided to be concerned over uses it might make of thermal imaging if unrestrained by the Constitution. G. Br. 34. Claiming that the information is too limited to be used broadly, the government asks to be trusted to self-monitor. The ability to freely use thermal imagers would actually promote privacy by avoiding mistaken searches. This argument is the antithesis of the Fourth Amendment, which was adopted because of the Framers' deep distrust of unchecked government. This argument was also made and rejected in *Karo*. Despite the good intentions of current counsel for the government, permitting indiscriminate

monitoring with thermal imagers "would present too serious a threat to privacy interests in the home to escape entirely some sort of Fourth Amendment oversight." *Karo*, 468 U.S. at 716.

CONCLUSION

For the reasons stated in Petitioner's opening and reply briefs, this Court should grant the Writ of Certiorari and reverse the judgment of the Ninth Circuit Court of Appeals.

Respectfully submitted,

KENNETH LERNER
Counsel of Record
LERNER & MEYER
621 S.W. Morrison Street
Suite 1450
Portland, Oregon 97205
(503) 223-0442
Counsel for Petitioner